

LOW LEAKAGE DIODE

Switching diode with a very low reverse current, encapsulated in a subminiature glass (DO-34) envelope.

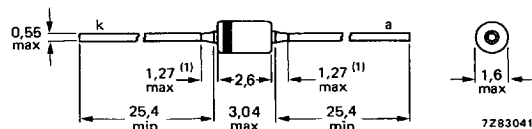
QUICK REFERENCE DATA

| | | | |
|----------------------------------------------|-------|------|--------|
| Continuous reverse voltage | V_R | max. | 125 V |
| Forward voltage $I_F = 200$ mA | V_F | max. | 1,0 V |
| Reverse current $V_R = 125$ V | I_R | max. | 1,0 nA |
| Diode capacitance $V_R = 0$; $f = 1$ MHz | C_d | max. | 8,0 pF |

MECHANICAL DATA

Dimensions in mm

Fig. 1 DO-34 (SOD-68).



(1) Lead diameter in this zone uncontrolled.

The cathode is indicated by a brown band on a black body.

RATINGS

Limiting values in accordance with the Absolute Maximum System (IEC 134)

| | | | |
|--------------------------------------------------------|-----------|------|-----------------|
| Continuous reverse voltage | V_R | max. | 125 V |
| Forward current (d.c.) | I_F | max. | 225 mA |
| Repetitive peak forward current | I_{FRM} | max. | 450 mA |
| Non-repetitive peak forward current $t_p = 1 \mu s$ | I_{FSM} | max. | 4 A |
| Storage temperature | T_{stg} | | -65 to + 175 °C |
| Junction temperature | T_j | max. | 125 °C |

THERMAL RESISTANCE

From junction to ambient in free air
mounted on a p.c. board with
a clearance of 10 mm

$R_{th j-a} = 400 \text{ K/W}$

CHARACTERISTICS

$T_j = 25 \text{ °C}$ unless otherwise specified

Reverse current under maximum light conditions
(illuminance = 500 lux)

$V_R = 125 \text{ V}$

I_R max. 1 nA

$V_R = 30 \text{ V}; T_j = 125 \text{ °C}$

I_R max. 300 nA

$V_R = 125 \text{ V}; T_j = 125 \text{ °C}$

I_R max. 500 nA

Forward voltage

$I_F = 1 \text{ mA}$

V_F 0,64 to 0,74 V

$I_F = 5 \text{ mA}$

V_F 0,70 to 0,80 V

$I_F = 50 \text{ mA}$

V_F 0,74 to 0,88 V

$I_F = 200 \text{ mA}$

V_F 0,83 to 1,00 V

Diode capacitance

$V_R = 0; f = 1 \text{ MHz}$

C_d max. 8 pF

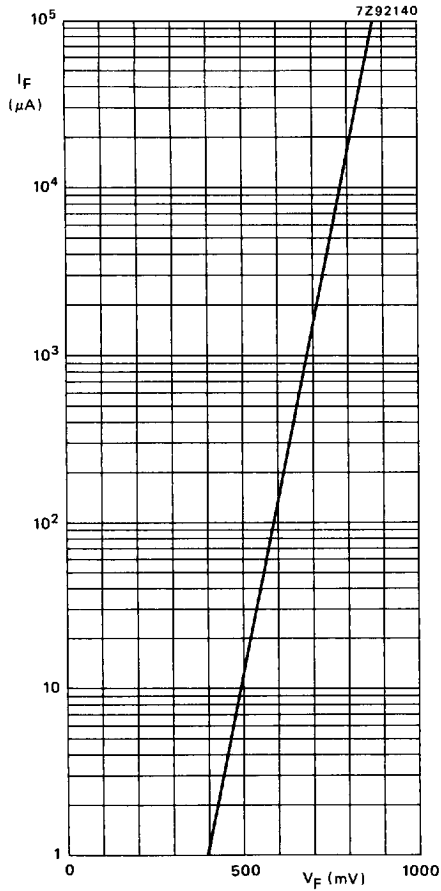


Fig. 2 $T_j = 25\text{ }^\circ\text{C}$; typical values.

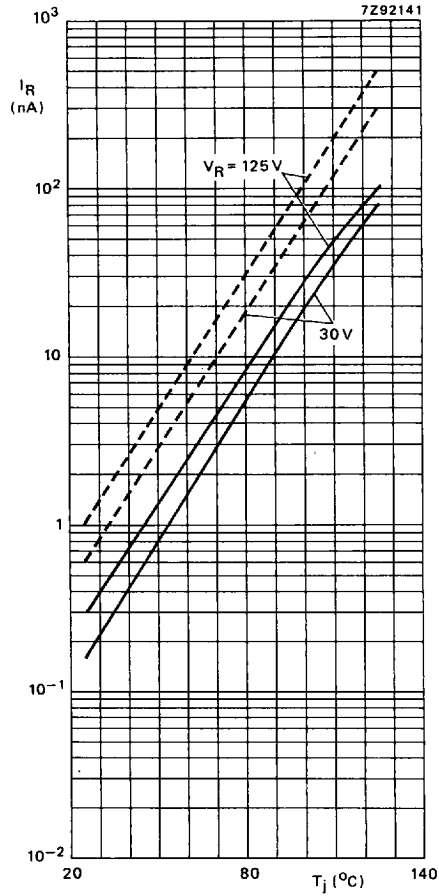


Fig. 3 --- = max. values;
 — = typ. values.

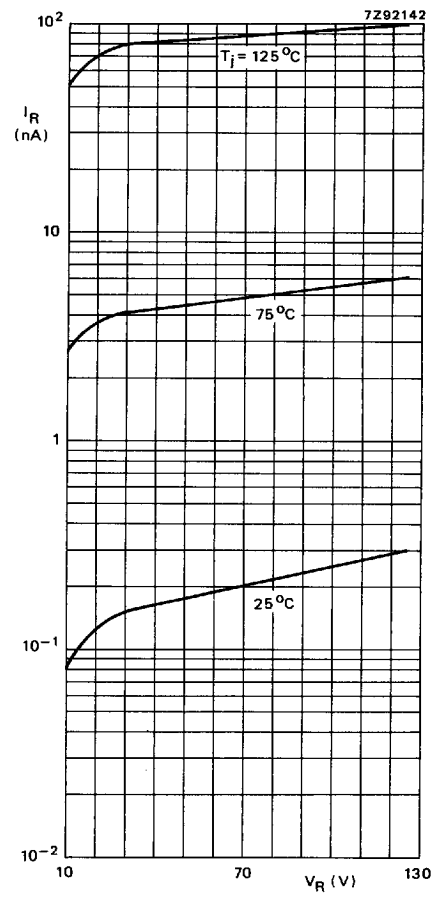


Fig. 4 Typical values.